

NOTE TO OUR READERS

Engaging in Conservation

conservation lifestyle means more than enjoying Missouri's outstanding natural resources. Being a conservationist means striving to increase knowledge, understanding the conservation issues

of the day, and being willing to engage on those important local, statewide, and national issues. Past Missourians have laid a great foundation for us to stand on and build a brighter conservation future. It's our challenge and duty not to tarnish but to build upon that great conservation legacy.

How do we engage? As some of my friends say, "Let's give back to the resource." Start with your daily support through your words and actions. Speak about conservation and its benefits to others who haven't had the opportunity to learn about the outdoors. Be an ethical outdoors person who abides by sporting rules and regulations and mentors the next generation of conservationists.

Be proactive with your time and resources. Get involved at the local level with conservation-related organizations and groups. Being an active member who shares your time and resources with these organizations will help grow conservation programs within the state.

Have a passion and a cause. If fishing is important to you, then clean, healthy waters are a must! If waterfowl is your passion, then Missouri wetlands, breeding areas, and wintering areas must be protected for the myriad of wetland species! If hiking is your passion, then healthy forests and streams must be protected to provide future generations the same opportunity! For every outdoor passion, there's an avenue to improve conservation and to conserve resources for future generations.

Be informed and proactive with your knowledge and comments. In a recent national survey, 2.5 million hunters, anglers, and wildlife watchers spent almost 35 million days enjoying Missouri's natural resources. Those same outdoor enthusiasts spend more than \$2.5 billion annually enjoying Missouri's outdoors.

Outdoor opportunities abound in late winter — get outdoors. Missouri's winter trout fishing, early crappie fishing, and the trout park opener on March 1 can jump-start the fishing season. Eagle watching opportunities still exist along



Missouri's waterways and new outdoor photography opportunities unfold daily. Now is a great time for a winter float or hiking one of Missouri's conservation areas such as Pickle Springs. Take your family on a winter walk as highlighted in this issue.

Looking for hands-on opportunities to improve conservation? Get involved with volunteer groups. Volunteering with the Department through the Master Naturalist program, nature centers, Stream Teams, or the Hunter Education program builds future conservationists. The Department works with many volunteer groups who promote the outdoors. Helping out at a youth clinic, a women's outdoor program, or at an elderly or a disabled conservation event helps promotes conservation to many outstanding Missourians.

As 2014 continues to unfold, ask yourself, "What have I done to promote conservation? What can I do this year?" I encourage each of you to take action, pledge your time, and work ardently to conserve fish, forest, and wildlife resources for future generations. Let's leave Missouri's waters cleaner, Missouri's forests healthier, and Missouri's fish and wildlife more abundant for our children, grandchildren, and future Missourians.

FEATURES

IO Show Me Walleye

by Adam Boman Learn the tricks to landing this elusive fish.

18 Winter Walk

by Gladys J. Richter
Don't stay cooped up! Adventure out with the family, and experience nature's splendor in a different light.

24 2014 Regulations Update

Cover: Ice-covered vegetation at
Shawnee Trail Conservation Area near
Mindermines, Mo., by Noppadol Paothong.
500mm lens • f/10 • 1/80 sec • ISO 200

DEPARTMENTS

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WHAT IS IT?

Our photographers have been busy exploring the intricacies of the Missouri outdoors. See if you can guess this month's natural wonder. The answer is revealed on Page 8.



GREAT RESOLUTIONS

In the January 2013 issue, there was an article, Conservation Resolutions, in which your director resolved to "make time for at least one new outdoor adventure each month." I'm happy to share that I took his idea and ran with it. Here are the "adventures" I completed.

- January: Rabbit and squirrel hunting at Busch CA
- **February:** Hike at Babler State Park
- March: Hiking and scouting for turkey at Pacific Palisades, Young, and Labarque Creek CA's
- April: Turkey hunting at Pacific Palisades
- May: Fly fishing at Taneycomo
- June: Hike at Castlewood State Park
- **July:** Hiked the Lewis and Clark Trail at Weldon Spring CA
- August: Hike at Cuivre River State Park
- **September:** Dove hunting at Busch CA
- October: Dove hunting at Weldon Spring CA

- November: Deer hunting (rifle season) in **Phelps County**
- December: Deer hunting (alt methods) at Upper Mississippi-West Alton CA

I'm proud to say many of these trips were my first times in a park, or my first time hunting a new animal, or hunting a new area. I harvested my first rabbit, caught my first trout with my dad and brother(a soon-to-be annual trip), and saw a good friend of mine harvest his first deer.

Great idea for a resolution and a great way to get more people enjoying the outdoors. I encourage anyone to try the same this year.

Tim Stiebel, St. Louis

WE HAVE LOTS TO SHARE

Each year, my appreciation for our Conservation Department grows. It is simply the best-run, bestmanaged governmental agency in Missouri. This morning, I decided that I would go deer hunting with my dad. In about four minutes, and for one

extra dollar, I was able to purchase and print a permit online. Other states can take weeks or months.

The public shooting range in our area is operated by the Department. It is cleaner and nicer than the private club to which I used to belong. They even provide free targets! Seriously, just in case one forgets to bring targets, there are quality, 1-inch, grid-style targets kept onsite, free for public use. It's above and beyond expectations for a public facility.

Further, a Department biologist has met with my dad (a landowner) regarding habitat management and restoration on his property. This guy is as professional as it gets, knowledgeable, and has the perfect personality for working with the public. He is currently writing a restoration and management plan for my dad to implement.

Finally, The Northeast/Kirksville Regional Office is just down the road from our house, and it's full of stuff for kids to do. I take my three small children there on rainy days, and there is a whole room full of indoor excitement to be had. Taxidermied animals, demonstrations, and displays. My kids love it. I've also taken the kids on a few of their guided activities, one of which involved hunting for and identifying animal tracks. Again, pure kiddie adventure.

I could go on, but suffice to say, I actually enjoy buying licenses and permits because I can see where the money is going. Professional staff, nice facilities, and a "public first" mindset.

Jesse Barton, Kirksville



I recently subscribed to your magazine, both print and email, and I am enjoying reading the current issue online. I remember your magazine from when I was a child, and I am curious about how long your publication has been in existence. I am 69 years old, so I think your magazine has been around a long time!

Phyllis Pryor, Chula

Ombudsman's Note: The first Conservationist was published on July 1, 1938. The formation of the Conservation Department was approved by voters in 1936, and the Conservation Commission first met in 1937, so the magazine is almost as old as the Department. —Tim Smith



Reader Photo

BUSY BEAVER

Jason Elkins, of Warrensburg, Mo., took this picture of the work of a truly busy beaver. Elkins took the photo on a private farm on the banks of Big Creek in Henry County. Elkins estimated the circumference of the sycamore tree to be at least 13 feet. "I am one of a group of 10 grade school friends that have hunted, camped, and hiked on this farm since we were very young," says Elkins. "This land has long been known for great waterfowl hunting, and it has always been known for growing big deer and turkey. Now, we can include big beavers to the area's lore." The actual beaver has not yet been witnessed in person, says Elkins, "but the story is starting to grow of the 'giant ghost beaver."



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Discover more about nature and the outdoors through these sites.

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Six times a year we'll bring you eye-popping art, photos and stories about Missouri's coolest critters. niftiest natural places, liveliest outdoor activities and people who've made a living in the wild. Come outside with us and XPLOR!

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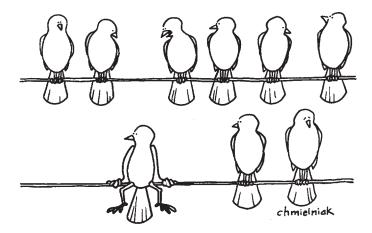
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"Artie's always gotta do things differently."

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^{17.} I certify that all information furnished on this form is true and complete.

Shawn Cunningham

HUNTING AND FISHING CALENDAR

05/25/13 09/15/13 OPEN 05/06/13	02/28/14 01/31/14 CLOSE 03/31/14 3/03/14
OPEN 05/06/13	CLOSE 03/31/14
5/06/13	03/31/14
11/01/13	2/02/14
	3/03/14
9/15/14	11/14/14
1/26/14	01/15/15
0/10/14	10/13/14
11/ 1/14	11/2/14
11/15/14	11/25/14
11/26/14	12/7/14
2/20/14	12/30/14
01/3/15	01/4/15
0/01/13	02/15/14
5/25/13	02/15/14
9/15/14	11/14/14
1/26/14	01/15/15
4/ 12/14	04/13/14
4/21/14	05/11/14
10/1/14	10/31/14
	09/15/14 11/26/14 11/1/14 11/15/14 11/26/14 11/26/14 12/20/14 01/3/15 10/01/13 09/15/14 11/26/14 04/12/14 04/12/14

Waterfowl see the Waterfowl Hunting Digest or mdc.mo.gov/node/3830

TRAPPING	OPEN	CLOSE	_
Beaver and Nutria	11/15/13	03/31/14	
Furbearers	11/15/13	01/31/14	
Otters and Muskrats	11/15/13	02/20/14	

For complete information about seasons, limits, methods, and restrictions, consult the Wildlife Code and the current summaries of Missouri Hunting and Trapping Regulations and Missouri Fishing Regulations, The Spring Turkey Hunting Regulations and Information, the Fall Deer and Turkey Hunting Regulations and Information, the Waterfowl Hunting Digest, and the Migratory Bird Hunting Digest. For more information visit mdc.mo.gov/node/130 or permit vendors.

Operation Game Thief

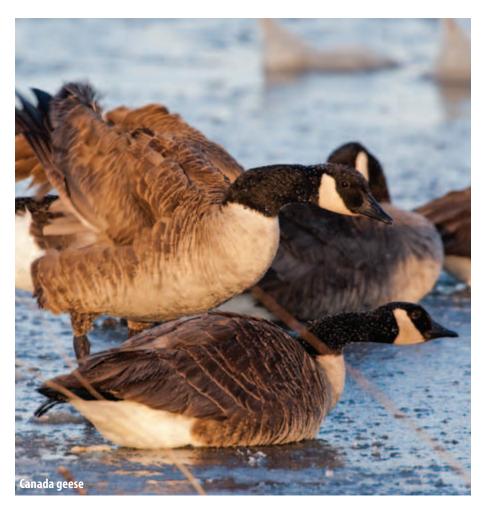
Help put game thieves out of business. If you see a possible violation in progress, call your county conservation agent immediately or dial the toll-free number below:

1-800-392-1111

All information is kept in strict confidence. Desirable information includes names of violators, vehicle description and license number, as well as the violation location.

ASK Ombudsman





Q. Can you tell me how a large Canada goose is able to walk on such a thin layer of ice on my lake? Why doesn't the ice break?

Canada geese can weigh up to around 16.5 pounds. As with other waterfowl, their feet have webbing between the toes and that tends to spread their weight over a larger surface area of the ice, reducing the chance that they will break through. It's the same principle as a person wearing snow shoes to prevent their feet from breaking through crusted snow. There is some limit to the thinness of the ice that will support the goose. If the ice becomes too thin, the bird will

break through. Geese spend a lot of time around ice and open water, so they probably develop good judgment about which ice will support them.

Q. I completed the huntereducation training years ago and still have my orange card that I received as proof of completing the course. I use the card when I purchase firearms hunting permits, but the permits

themselves, and my Heritage Card, do not include a huntereducation identification number. Why is that?

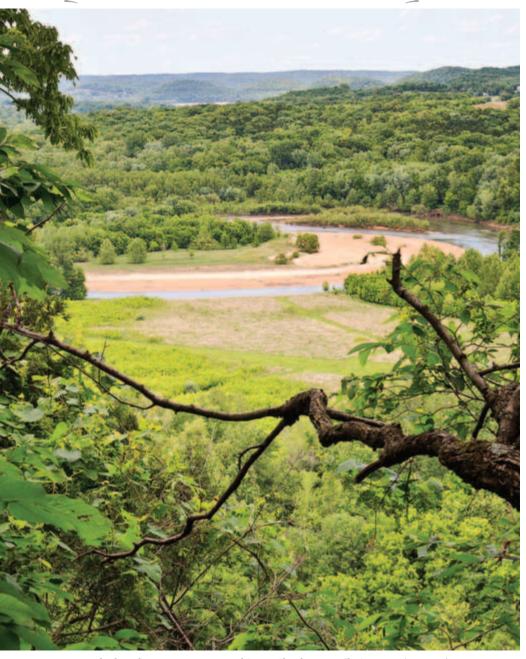
Several decades ago, our hunter-education records were not computerized as they are today. If there is no hunter-education identification number on your permits, then our computer records do not include that information. Please contact our Hunter Education staff at our Department headquarters (see Page 3) so that we can add your certification record to our database. Once that is done, you will see a certification number on any future permits that you purchase, and you will not have to continue to present the orange card when you buy firearms hunting permits. It is important to get us that proof of completion of the course before the old card is lost or it falls apart. It may save you from having to take the huntereducation course again, which can happen if you lose your documentation.

Q. What are the rules on removing tree stands after deer season ends?

The tree stand removal regulations of this Department only apply to areas that we manage, primarily conservation areas. On those areas, portable tree stands may be placed or used only between Sept. 1 and Jan. 31. Unattended stands must be plainly labeled with the full name and address or Conservation. Identification number of the owner and must be removed by Feb. 1 each year.

Ombudsman Tim Smith will respond to your questions, suggestions, or complaints concerning the Conservation Department. Address: PO Box 180, Jefferson City, 65102-0180 Phone: 573-522-4115, ext. 3848 Email: Ombudsman@mdc.mo.gov

NEWS & EVENTS by Jim Low



An overlook at the 429-acre Myron and Sonya Glassberg Family Conservation Area in Jefferson County offers visitors a picturesque view of the Meramec River Valley.

Mysun Foundation Donates Area

Thanks to a donation of \$1.75 million from the Mysun Foundation, Missourians are now able to enjoy nature at a new conservation area in Jefferson County.

The 429-acre Myron and Sonya Glassberg Family Conservation Area (CA) is named in honor of the late Myron and Sonya (Sunny)

Glassberg and their family. The Glassbergs, who established the Mysun Foundation in 1968, were well-known throughout the St. Louis metropolitan area for their generous philanthropic spirit and love of nature.

Located in north-central Jefferson County about 6 miles south of Eureka, the property is mostly forested, with scattered old fields, limestone, sandstone, and dolomite outcroppings, scenic views of the Meramec River Valley, intermittent streams, and a 3-acre fishing lake. A series of old roads provide a trail system of 1.5 miles and an additional hiking trail (0.5 mile) surrounds the fishing lake. Completion of a new loop trail is planned for the future.

The new area is home to a number of statelisted species of conservation concern and more than 50 species of fish and is bordered by the Meramec River to the north. A monument recognizing the Glassberg family's donation is located near the parking lot on the main entrance trail to the area.

Forestry Regional Supervisor Cathy deJong, who worked closely with the Glassberg family on the acquisition, commented: "Due to the generous spirit of Myron and Sonya Glassberg and the Mysun Foundation, this beautiful tract of land located in the valuable LaBarque Watershed will forever be preserved for the citizens of Missouri to enjoy. Both Myron and Sunny enjoyed the outdoors and gave generously to many projects that they were passionate about. Sunny and the Glassberg family enjoyed a small dedication ceremony that was held in their honor on May 6, 2013, on the area, just a few days before the passing of Sunny on May 19. The Glassberg area opened at the end of October 2012 and has already become a favorite area for hikers and conservation enthusiasts, with a full parking lot on many weekends."

A grant from the U.S. Forest Service Forest Legacy Program also assisted with the purchase of the property. To visit Myron and Sonya Glassberg Family CA, drive south on Route W from I-44 in Eureka, then drive 4.3 miles west on Route FF. The area parking lot is on the north side of the road, approximately 0.4 mile past the intersection of John McKeever Road and Route FF. For more information about the Myron and Sonya Glassberg Family CA, visit *mdc.mo.gov/a201201*. For more information about the Department's land donation program *mdc.mo.gov*/ node/23263.

2014 No MOre Trash Contest

Missouri students in grades K–8 can fight litter by participating in the 2014 "Yes You CAN Make Missouri Litter-Free" trash-can-decorating contest.



From the 2013 No MOre Trash Contest, the winning entry from the 3–5 grade category.

The contest encourages students to join the fight against litter by decorating and displaying a large trash can with the "No MOre Trash!" logo and a litter-prevention message, using a variety of creative media. The contest is designed to teach kids how litter hurts them, their communities, and their environment and raise public awareness of the litter. Public, private, and home schools may submit one entry in each competition category: K-2, 3-5, and 6-8. First-place winners in each category receive \$200, which is awarded to the sponsoring schools. Winners are eligible for a grand prize of a trophy and \$600 awarded to the sponsoring school. Contest rules and entry forms are available *nomoretrash.org*. Participating school groups must submit completed entry forms and up to three photos by March 14.

Apprentice Hunter Authorization

Missouri's Apprentice Hunter Authorization empowers hunters to introduce friends and family to the outdoor traditions they treasure. The \$10 authorization is not a permit, but a gateway to hunting. Missouri's Wildlife Code requires anyone born on or after Jan. 1, 1967, to pass an approved hunter education course before purchasing a firearms hunting permit. Buying an Apprentice Hunter Authorization



CONSERVATION COMMISSION ACTIONS

The December Commission meeting featured presentations and discussions regarding the habitat, wildlife, and public-use management at August A. Busch Memorial and Weldon Springs conservations areas; the Ozark National Scenic Riverways General Management Plan; and Missouri wetlands science and management. A summary of actions taken during the Dec. 12–13 meeting for the benefit and protection of forest, fish, and wildlife, and the citizens who enjoy them includes:

>> Approved the following seasons:

Turkey

Youth — April 12–13, 2014 **Spring** — April 21–May 11, 2014 **Fall** — Oct. 1–31, 2014

Firearms Deer

Urban Portion — Oct. 10–13, 2014
Early Youth Portion — Nov. 1–2, 2014
November Portion — Nov. 15–25, 2014
Antlerless Portion — Nov. 26–Dec. 7, 2014
Alternative Methods Portion — Dec. 20–30, 2014
Late Youth Portion — Jan. 3–4, 2015

- >> Voted to move ahead with changes it approved earlier this year for fishing regulations at Lake of the Ozarks and Truman Lake. The changes will go into effect March 1, 2014. Those changes include instituting a slot length limit that protects blue catfish between 26 and 34 inches and increasing the daily limit to 10 blue catfish, with not more than two fish 34 inches or longer.
- >>> Voted to allow the sale of one crayfish species, *Orconectes virilis* (also known as the northern or virile crayfish), for use as live fish bait, effective March 1, 2014.
- Approved the purchase of 3.7 acres in Adair County as an addition to the Northeast Regional Office.
- >> Approved accepting the donation of approximately 223 acres in Hickory County from the estate of Lawrence Matthew Schumacher as an addition to Mule Shoe Conservation Area.
- Approved the advertisement and sale of an estimated 1,282,888 board feet of timber on 717 acres of Compartment 6 of Pea Ridge Conservation Area in Washington County. The harvest will improve wildlife management, forest health, and the long-term sustainability of the forest by removing overstocked and mature trees.
- Approved the nominations of Edwin "Ed" Stegner and Elizabeth "Libby" Schwartz for induction into the Missouri Conservation Hall of Fame.

The next Conservation Commission meeting is March 6 and 7. For more information, visit **mdc.mo.gov/node/3430** or call your regional Conservation office (see Page 3).

waives the hunter education requirement for up to two years. This allows apprentice hunters to try hunting before investing the time needed to complete hunter education. During their apprenticeship, authorization holders must hunt in the immediate presence of companions

NEWS & EVENTS

(continued from Page 7)

who are 21 or older and are hunter-education certified. This ensures both safety and the opportunity to learn from experienced mentors. The authorization is available to residents and nonresidents 16 and older for two years. It is a great way to give potential hunters a taste of what they are missing. For more information, visit mdc.mo.gov/node/438.

New MO Woods Smartphone App

Missouri Forestkeepers has a new smartphone app that enables forest landowners to evaluate their woodlands for health, wildlife habitat, and commercial timber value. The MO Woods app also provides links to other forest-management resources, including information about insect and disease issues, wildlife habitat improvement, and guidance for conducting timber sales that protect forest health and maximize profits.

The app is available in both Android and Apple formats for smartphones. Find it in your app store by searching for "Missouri Forestkeepers" or "MO Woods." Once it is loaded on your phone, go to your woods. The app's detailed instructions and photos will guide you through entering the necessary information about forest density, and tree species, size, and quality. With this information, the app will provide three prescriptions — one for timbersale potential, one for forest health, and one for

wildlife value. You can instantly email results to a forester for further information.

Renew Permits for 2014

Many hunting and fishing permits expire at the end of February, including 2013 permits for small game, fishing, trout fishing, and combination hunting and fishing permits. Now is the time to renew these permits so as not to miss opportunities in the year ahead.

Buying permits is easier now than ever, with three options. You can buy permits by visiting **mdc.mo.gov** and clicking on "Buy Permits." This e-Permits option lets hunters, trappers, and anglers buy permits at home or on any computer and print them immediately.

All sport-fishing and sport-hunting permits are available through e-Permits, along with trapping permits and the Apprentice Hunter Authorization. A \$1 convenience fee is added to online permit transactions. The \$1 covers all permits purchased at one time.

E-Permits are printed on regular printer paper and can be saved on a computer, allowing you to print replacements if permits are lost or destroyed. Permits may not be shared, and additional copies of a permit do not provide additional valid permits for the buyer or others

Commercial permits and lifetime permits can be purchased only through MDC's Central Office by calling 573-751-4115. You can still buy permits from vendors or by phone by calling toll-free 1-800-392-4115. Allow up to 10 days for mail delivery of permits purchased by telephone. Phone purchases are subject to a \$2 convenience fee.

Low permit cost is one more reason Missouri is a great place to hunt and fish. Missouri residents pay \$12 for an annual fishing permit, while residents in the eight neighboring states pay an average of \$20.80. Missouri's \$17 Resident Any-Deer Permit is a bargain compared to the average of \$46.63 for equivalent privileges in surrounding states.

Hunting Mentorship in Missouri

Missouri's rich hunting tradition benefits the state in many ways, from providing healthful recreation and food to pumping more than \$1



WHAT IS IT?

Striped Skunk | *Mephitis mephitis*

Cat-sized mammals, skunks produce an unpleasant scent when agitated. Glands at the base of the tail secrete this stinky musk and can be aimed and sprayed at will. Prior to spraying, skunks usually stamp their feet and hold their tails high in the air to warn intruders. They are found statewide but are least numerous in the Mississippi Lowland where there is little high land for den sites. As scavengers, skunks eat small animals and insects, helping to control those populations. Females more than 1 year old begin breeding in February while younger females mate about a month later. The single litter of 4–6 young is born from early May to early June. — photo by Noppadol Paothong



The mainstay of hunter recruitment continues to be mentorship by those who already hunt.

billion into the state economy annually. Hunting also is a necessary tool for managing wildlife populations. To ensure the continuation of these benefits, the Conservation Department has a wide array of programs to encourage hunting. But the mainstay of hunter recruitment continues to be mentorship by those who already hunt. The following examples illustrate the importance and the rewards of mentoring new hunters.

Jamie Floyd, of Warrensburg, introduced his two sons to hunting early. Justin shot his first deer in 2010, at the age of 6. Julian, 7, joined the fraternity of deer slayers during the early youth portion of the 2013 deer season.

"We spend as much time as we can on my uncle's farm in Cedar County," says Jamie. "Whether they know it or not, the youth deer season is the ultimate classroom for them. It's not just lessons on firearms safety and hunting ethics, but everyday lessons that I'm convinced they will use throughout their lives."

Floyd is careful to make their father-son hunts fun. "It's their time," he says. "If they make more noise than I do and get busted by a whitetail, we just chalk that up to a learning opportunity."

Julian surprised his dad by being first to spy a deer last November. Practice sessions at the shooting range paid off when the youngster dropped the 8-point buck where it stood. It turned out to be the largest ever taken at the family farm.

"What a confidence booster for a little guy who didn't believe he would ever get a deer," says

DID YOU KNOW?

Missourians care about conserving forests, fish, and wildlife.

Connecting Missourians to Conservation

- **» Xplor:** Six times a year, the Department's magazine for kids reaches more than 150,000 subscribers with exciting information about critters, natural places, and outdoor activities. Free to Missouri residents, visit *xplormo.org* to subscribe your child.
- **Website:** For more information about conservation in Missouri and other ways to receive information from the Department, visit mdc.mo.gov.
- **» Facebook:** With nearly 60,000 "likes" and regular updates and posts, our Facebook page is a great way to receive and share conservation information. To find out more, visit facebook.com/MDConline.
- **» Email lists:** For regular updates on Department news and events, subscribe to one or more of our email lists at mdc.mo.gov/ user_mailman_register.
- **» YouTube:** The Department's YouTube channels contain more than 1,000 videos that have had more than 8 million views. Topics range from how-to videos on land management practices to cooking wild game to wildlife to outdoor skills and much more. Visit *youtube.com/user/* moconservation to learn more.
- **** Twitter:** If you're looking for shorter bursts of conservation information, follow us on Twitter at twitter.com/MDC_Online.

Jamie. "Words can't describe the joy and pride those times give me as a father. I'm thankful for the father-and-son moments shared over the course of that weekend. No TV or video games, just the Missouri forest full of life."

Faron Teague rallied friends to create what they call "Deer Camp" at Teague's business, Indian Trail Archery and Guns in Salem. Each year during the early youth portion of firearms deer season, they open early and stay open late during the weekend season, serving chili and hot dogs to everyone who brings in deer or comes to see the deer others bring in. Every youngster who brings in a deer gets his or her photo taken and are entered in a drawing for prizes. The most coveted prize each year is a taxidermy mount of a deer. This is awarded in a random drawing, without regard to the deer's size or sex. One winner was so thrilled with her mounted doe head that she held it in her arms throughout the 25-mile drive home from the taxidermist.

Teague figures they spend \$500 to \$1,000 a year on Deer Camp.

"It's worth every penny," says Teague. "It's kind of my pre-Christmas present to me. Honestly, it's the most fun thing they'll ever do. The kids that come in here have an excitement I lost years ago. It's all new to them. It's the same as when I sell a bow to a young person. I love to look in their eyes when they first shoot. When they hit the center of the target, that's a look you'll never see again."

Beyond the pleasure it gives him and his band of "loafers," Teague sees Deer Camp as an investment in the future.

"The average age of Missouri deer hunters is going up," says Teague. "If we don't get young people involved in our sport, we're going to lose them."

Do you know a boy or girl who has shown an interest in outdoor activities but whose family doesn't hunt? Does one of your coworkers ask you about hunting? They might be waiting for an invitation.





REPUBLICATION SHOULD'VE REPUBLICATION OF THE REPUBL YESTERDA

No angler wants to hear these words, but they are especially stinging to the ears of a walleye seeker. Always on the move, walleye rarely linger long and could be said to be a fish without a PO box. Even if they stay in one location, walleye are known for being picky, refusing to hit a lure that worked great just the day before.

Because of these habits, walleye can be challenging fish to catch. However, the pleasure of the chase and the delicious reward of a walleye dinner are enough to keep many anglers on the trail.

Improve your angling odds by understanding the annual patterns of Missouri reservoir walleye and learning some new techniques.

Native to Missouri

Walleye are native to portions of Missouri and many river populations sustain themselves with natural reproduction. However, walleye in our large and small reservoirs, and some streams, do not reproduce enough to meet desired catch and harvest levels. The Missouri Department of Conservation stocks fingerling walleye into these waters.

Each year, Department staff at Lost Valley and Chesapeake hatcheries raise and stock more than 1.2 million walleye into Missouri lakes and streams to meet angler demand and desired harvest levels. Lakes that receive walleye stockings include Bilby, Bull Shoals, Jacomo, Lake of the Ozarks, Longview, Long Branch, Mozingo, Norfork, Pomme de Terre, Smithville, Stockton,



Table Rock, and Truman. These reservoirs offer a wide variety of walleye fishing opportunities in balance with other sport fish species. Some lakes, such as Stockton Lake, are harvest-oriented walleye fisheries, with a minimum length limit of 15 inches. Other lakes, such as Bull Shoals, are more trophy-oriented fisheries and have an 18-inch length limit.

Seasonal Patterns

The secret to fishing is to fish where the fish are. Finding walleye is not an easy task, but there are



WALLEYE GET THEIR NAME FROM THEIR LARGE EYES, WHICH ALLOW FOR EXCEPTIONAL VISION IN LOW-LIGHT CONDITIONS.



some seasonal patterns that can be counted on year after year.

LATE WINTER/SPRING In late winter, walleye are found in their traditional pre-spawn locations. Hot spots during this time are deep pools near spawning shoals in tributary rivers and streams. Walleye also congregate in main lake areas along rocky shorelines and points, as they prepare to spawn on these rocky substrates.

The timing of the spawn can vary greatly on any particular body of water from year to year. In addition to length of day, the timing of the walleye spawn is heavily influenced by water temperature and water flow. Spawning activity of males is typically initiated as water temperatures approach 50 degrees, but figuring out

when females will move to the spawning shoals is difficult. Spawning typically begins in the first part of March with Missouri's southernmost walleye populations and can continue through the middle of April in northern Missouri.

After the spawn, walleye are hungry and on the prowl. At this time, anglers catch walleye in a variety of habitats and at different depths. In reservoirs, this timing often coincides with the crappie and black bass spawning periods. Thus, a lot of walleye are caught by crappie and bass anglers as walleye cruise the shallows in search of food. During this time it is important to remember "find the bait, find the prey." Walleye in Missouri impoundments prefer to eat shad and sunfishes. Locating these fish can be key to finding walleye in the spring and summer.



SUMMER As water temperatures warm and summer patterns set in, walleye move to deep water in search of cooler temperatures. In reservoirs, knowing the location of the thermocline is a major key to finding schools of walleye in the summer. The thermocline is the layer of the water column where oxygen levels plummet to a level that cannot support fish. Walleye are a cool-water species, and they tend to hug the thermocline to stay in the coolest water that still has adequate levels of oxygen. Focusing on locations where the thermocline transects underwater humps, depressions, timber, and other structures often yields the best walleye catches in the summer.

FALL/WINTER When fall arrives and water temperatures start to cool, the thermocline breaks up and walleye once again can be found in a variety of habitats. In late fall, walleye are again caught in shallow habitats and in tributary arms, following schools of shad. With the coming of winter, walleye tend to follow two major patWalleye are a cool-weather species, so as water temperatures rise in the summer, they will move to deep water in search of cooler temperatures.

terns. In mainlake areas, walleye can be found below large schools of shad in deep-water areas. In tributary habitats, walleye move back into large-pool habitats.

Points, Wind, and Light

In addition to these seasonal patterns, there are a few key factors that veteran walleye anglers keep in mind. These are points, wind, and light.

Walleye anglers know that point habitats are favorite ambush points for walleye. They also know that the side of the lake receiving a strong wind is the place to be because wind action concentrates phytoplankton, which attracts shad. Finally, walleye anglers know that lowlight conditions are often the time when walleye are the most aggressive and feeding. Walleye

get their name from their large eyes, which allow for exceptional vision in low-light conditions. Equipped with the advantage of low-light supremacy, walleye often move shallower to feed during the late evening, night, and early morning hours. Walleye also tend to move shallower on cloudy days.

Fishing a point on the windy side of the lake, in low light conditions, is a good way to start the day.

Baits and Presentations

Fishing technology and innovations are changing every day, offering new tools for anglers. However, the four most common types of walleye baits used in Missouri are crankbaits, bottombouncers, jigs, and spoons. Color choices can be classified into two types: natural and loud. It is a good idea to have both options in your tackle box. Natural colors mimic baits that walleye are actually eating on your body of water. Loud colors are bright colors, such as chartreuse or pink, that are used to get a reaction bite. The best bait choices on a particular fishing trip depend upon the time of year and the type of habitat you are fishing. Let's look at some times to use these four types of baits throughout the year.

LATE WINTER/SPRING During the pre-spawn and spawning period, walleye are sluggish due to low water temperatures and lower metabolism rates. To trigger strikes, slower presentations are key. Jigs and/or worms on the bottom and suspending jerk baits are pre-spawn favorites. This is the time for bank anglers to shine, as walleye stack into tributary streams and along the lake's rocky shores. While walleye have other things on their mind during the spawn, it can be a great time for beginning walleye anglers to get into a lot of fish.

Post-spawn walleye are found in a variety of habitats and water depths, meaning that there is a wide variety of bait options that can be successful during this period. Crankbaits, bottom bouncers, and jigs are all effective.

Trolling crankbaits enables an angler to cover a lot of water and locate walleye quicker. Trolling speeds can vary from 1.5 to 3 mph, with the lower end better for feeding walleye and the upper end for triggering "reaction" strikes.

Bottom bouncers are probably the most popular bait of Missouri walleye anglers. They



During the pre-spawn and spawning period of late winter/early spring, walleye are sluggish. During this time, slower presentations such as jigs or worms, such as this crawler harness, work well to trigger strikes.

trigger more strikes due to the use of live baits such as night crawlers, minnows, or leeches. A bottom bouncer is a large weight that keeps the bait at or near the bottom of the lake. Attached to the bouncer is a line and lure, which is trolled at a speed slower than 1 mph. A quick Internet search will result in dozens of methods and baits used with bottom bouncing setups.

Fishing a jig head tipped with a crawler, minnow, or soft plastic is a great option when fishing a location known to hold walleye.

SUMMER Summer offers some of the most consistent fishing patterns for walleye angling, especially in daytime hours. As mentioned before, location of the thermocline is key. During



summer in particular, when you catch a walleye, continue to fish the same depth and habitat type to find more walleye.

Trolling deep water for suspended walleye is a favorite of veteran walleye anglers in the summer. This type of trolling takes a lot of experience to perfect. Getting the right speed and equipment setup to put your crankbait into the narrow depth range that suspended walleye are using is critical. The biggest factors that determine lure depth are type of crankbait, type of line, and length of line unspooled. Tools such as line counting reels, metered line, lead-core line, and crankbait diving charts can be found with a simple Internet search.

Fishing with spoons can be really effective in the summer, once suspended walleye are located. With this method, you simply lower your spoon vertically below the boat, rip the bait upward, and let it fall back through the suspended fish. The falling spoon looks like a dying baitfish falling through the water column. Perhaps the best place to use spoons is in or near standing timber where crankbaits and jigs would become snagged.

As in the spring, bottom bouncers and jigs tipped with live bait are hard to beat when walleye are found near the bottom of the lake.

FALL When walleye move shallow in the fall, a favored method is casting shallow crankbaits. Just remember to keep your trolling motor running and to not stay in one location too long. Walleye are on the move, and you should be, too. Fishing in the fall can be some of the most action-packed angling, as other species such as black bass and white bass are also shallow and feeding aggressively. As always, try mainlake and secondary points, but also be on the lookout for congregating baitfish in tributary streams.

River Walleye Don't overlook river walleye.

The Missouri, Mississippi, Current, St. Francis, and Black rivers offer walleye populations that receive comparatively less fishing pressure than lakes. The kicker is that walleye patterns can be even harder to identify in these habitats. The same presentations and baits can be effective in river habitats, but river walleye are often more challenging to catch than their reservoir counterparts.



Trolling crankbaits enables an angler to cover a lot of water and locate walleye quicker. Trolling speeds can vary from 1.5 mph, better for feeding walleye, to 3 mph, for triggering "reaction" strikes.

WINTER With the onset of winter, walleye feeding behavior slows, but they can still be caught with specialized tactics. Walleye will often be very deep. Vertical fishing with spoons, jigs, and other heavy lures below schools of shad in the main lake can be effective. This technique is similar to summertime spoon fishing. Let the bait fall to a desired depth, jerk it upward, and let it fall downward through the fish.

If you don't enjoy cold weather, winter is also a good time to clean out your freezer. Use up tasty walleye fillets in preparation for the new year's walleye spawn and the start of the new season.

Where's the Walleye?

With walleye, nothing stays the same for long. However, using the patterns and presentations discussed here, you will have a better chance of success the next time you're on their trail. By also keeping a fishing journal, you will be able to track the times and conditions when you were able to locate walleye. These observations will help you quickly and effectively locate walleye in the future.

To learn more about walleye fishing and fishing prospects for your area, visit our Walleye Fishing Web page at *mdc.mo.gov/node/5769*. ▲

Adam Boman is a fisheries management biologist for the Department of Conservation in the Southwest Region.







t was a case of whodunit. Who made the footprints on the canvas of new-fallen snow? We knew that it was not a dog or a cat, for each track had only two toes that plunged deep into the snow. A little farther along were many more of the same tracks. Then, as my family followed them like a crew of detectives, we saw the animals that had left them behind as they bound away with their white tails held high. We had found deer tracks. For preschool-age children, it was a fun and exciting adventure.

Family outings need not be reserved for spring, summer, and fall. Winter is more than bare trees and red, fluffed-up cardinals sitting on branches. It is a great time to see nature's splendor in a different light.

Mysterious Trees

Most of our native trees drop their leaves just before the cold, grey days of winter to reveal many features not seen under a cover of leaves. Just the mere outline, or silhouette, of each tree is a fascinating sight — trees without their clothes on as my 4-year-old pointed out.

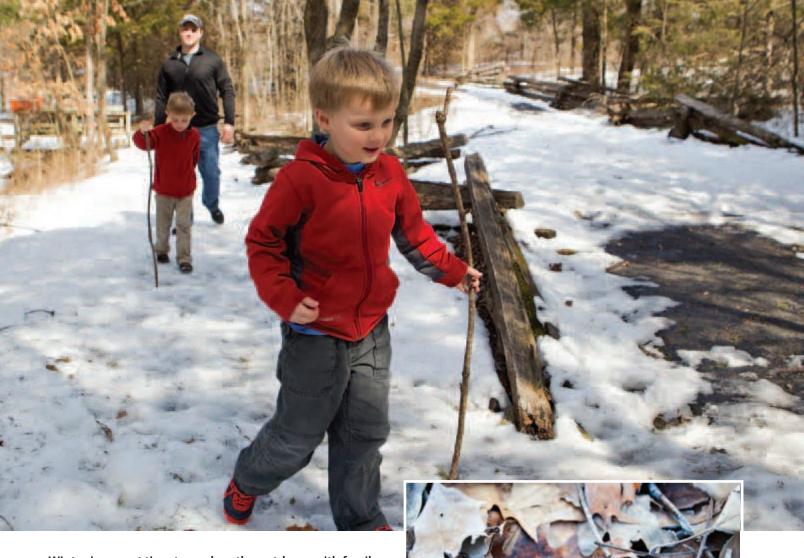
Some trees can be identified at a distance by their overall shape. Elm trees, for example, often have a vaseshaped "skeleton." Other trees may be recognized by their unique bark patterns. Sycamores usually have bone white or spotted grey and white bark. Persimmon trees look like they have blocky alligator-like skin. Hackberries have warty trunks, and honey locusts are armed with long, sharp spines.

Strange features such as galls and burls are also much easier to spot in the absence of leaves. Galls often look like brown golf balls attached to twigs. They may be caused by fungus or bacteria, but they are often caused by insects such as wasps, which sting or pierce the twig and lay eggs. The tree's tissue becomes irritated and then responds by encasing the egg or tiny feeding larvae in layer after layer of plant cells. When warmer days arrive the new insect emerges from the gall. It is like a personal little room to stay in all snug and warm until spring returns.

Many animals rely on snags and trees with hollow trunks for shelter. Who lives there? Sometimes the answer will surprise you.

Burls are bark-covered lumps and bumps on trees that come in all shapes and sizes. They may appear as familiar objects, from mushrooms to hearts. Some even look like faces looking back. Burls can grow very large. They are most often produced as a response to damage to the tree.

Hollow trees also stand out in winter. Many animals rely on dead snags and living trees with hollow



Winter is a great time to explore the outdoors with family.

trunks for shelter. It is fun to look at these shelter trees and speculate who lives there. Is it a raccoon, an owl, or a squirrel? Sometimes the answer will surprise you. The same shelter may serve as a home to different animals depending on the season.

Songs of the Season

While many birds migrate to warmer places, there are quite a few that stick around and brave the winter weather. Bird watching is an activity that all family members can enjoy.

You may wish to begin your bird-watching adventure by first feeding the birds in your own yard. It can be as simple as sprinkling some black sunflower seeds in a bare area of your lawn or putting out a hanging feeder. Providing some suet also gives birds a good energy source when snow falls. Birds will be attracted to your feeding stations. Cardinals, tufted titmice, sparrows, chickadees, finches, and woodpeckers are some of the most common visitors. It is also fun to experiment with different types of food such as fruits and seeds to attract different species.

Children like to keep track of their discoveries, so you may wish to write down your family's bird sightings in a small notebook. It is interesting to record what you see each winter, or if you wish, all year long. Years from now you will have a record to look back on of your family's time spent bird-watching together. A pair of binoculars and a small pocket field guide to birds will also help you discover more about the resident birds in your area.

After a few days watching the birds outside your window, get out and take a stroll on a sunlit winter day through a wooded area to look and listen for more birds. One of the most fascinating little birds to watch in winter is the nuthatch.

Because white-breasted nuthatches have a very busy behavior, they are fun for young children to watch. With a "yank-yank" nasal call they look like tiny acrobats as they creep all over a tree trunk in an upside-down fashion in their search for food.

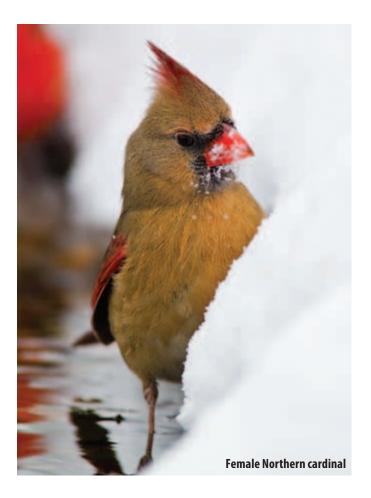
But don't spend all of your time looking up in the trees. Be sure to watch lower down as well. Some birds feed on the ground. Fox sparrows and dark-eyed juncos are classic examples.

During winter months many birds have less color than they do in spring and summer. They also may not be quite as vocal. Be sure to listen carefully for small pips, tweets, and squeak-like sounds while on your outing.

A couple of easy to recognize birdcalls are those of the white-throated sparrow and the black-capped chickadee. White-throated sparrows seem to repeat a slow phrase of "Ol' Sam Peabody," while black-capped chickadees call out their name with a "chick-a-dee-dee-dee."

Weeds and Seeds

Old fields, fencerows, and wooded edges are excellent places to view birds and other wildlife. Here animals may forage among the plants that have remaining seeds. Gold



finches are especially fond of the mature seed heads of thistles and coneflowers. Giant ragweed plants, which can grow to nearly 10 feet tall, provide seeds that are relished by quail and other seed-eating animals.

Several native wildflowers may be identified by their stem and seed structures during winter. While not brilliantly colored during winter, wildflowers have a second life with their architectural beauty. Coneflowers, milkweed, and cattails are all easy to spot by their characteristic seed structures.

Around oak and hickory trees you may find the remains of acorns and nuts after mammals such as squirrels and other rodents have feasted. Seed-containing structures such as honey locust pods and sweet gum balls are also easier to spot on bare trees than during the warm, leafcovered days of summer.

Tracks and Trails

Winter is a great time to observe mammal activity, even if you don't see the animal itself. The footprints that they leave in the snow and mud this time of year can tell stories of food storage, pursuit of prey, and even acts of play.

With new snow on the ground it is fun to guess who left their impressions. Activities with tracks can include counting the number of toes on each foot and the size of the track. Following where the tracks lead is also quite interesting. Do the tracks go on forever or do they stop at a rocky shelter or perhaps the base of a tree? Is there a line drawn where the animal dragged its tail in the snow? Excitement builds as more clues are discovered.

Sometimes the mere location of the tracks gives away the animal's identity. Slippery, snow-covered stream banks can serve as amusement parks for river otters. Tiny three-toed tracks around feeders, gardens, or trees indicate songbirds.

By keeping a small journal of your outdoor discoveries you will soon have your own personal field guide to neighborhood tracks. Measure track sizes and sketch their shapes. Make notes as to whether claw marks were present, how many sets of the same tracks you found, and more. Parents may wish to keep a few blank notebook pages to trace the outlines of their children's feet from year to year to look back on as well.

Safe Winter Outings

Missouri's trees, birds, wildflowers, and mammals all present opportunities for family enjoyment. As with all outdoor activities, be sure to think of safety first and to dress appropriately for the season.

A winter walk with young children should not be long. A short little scavenger hunt in your own backyard is a



great way to discover a lot about Missouri's wildlife and plants. It is best to dress in layers during winter. If it is a cold day, the layers will help you stay warm. If the weather warms up, you can just take off a layer or two to feel more comfortable.

Be very careful of hypothermia, especially if your clothing becomes wet. Having extra dry clothing with you on a longer trip can make a big difference to your well-being. Make sure to take along snacks, water, and a first aid kit. Also, be sure to let others know of your plans. Winter weather can change rapidly. Knowing where you plan to explore and when you plan to return home are important to your safety.

Conservation Opportunities for Winter Months

For those interested in more exploration activities during winter, the Department of Conservation provides many programs. Conservation nature centers give interpretive walks, wildlife watching opportunities, and special proAs with all outdoor activities, be sure to think of safety first and to dress appropriately for the season

grams on topics geared to families with children.

Evening owl prowls, animal track identification, winter bird feeding, and Eagle Days activities are just a few of the winter events geared for family enjoyment. Contact your local Conservation office or nature center for programs in your area. You may also search upcoming pro-

grams around the state by logging on to *mdc.mo.gov*. Just click on the events tab for up-to-date program information. Also keep an eye on the new upcoming events feature on Page 33 for ideas.

Plan wisely, adventure safely, and check out the sights and sounds of winter. It just might become your family's favorite time of year for outdoor discovery.

Gladys J. Richter is an interpretive freelance writer who lives near Richland, Mo.

Regulations One of the second of the second

MISSOURIANS CARE ABOUT forests, fish, and wildlife. To ensure these resources are protected, the Conservation Department reviews the *Wildlife Code of Missouri* each year. In doing so, the Department considers hundreds of suggestions from hunters, anglers, and other citizens. Although every suggestion cannot be adopted, all are carefully reviewed. The following is a summary of key changes to the *Wildlife Code*. The changes will go into effect March 1 unless noted.

New regulations will protect larger blue catfish so they can reach their growth potential, allow a limited harvest of trophy blues longer than 34 inches, and offer an increased daily limit for smaller blue catfish.





Missouri is a world-class place to hunt, fish, and experience nature. The following rules offer new opportunities to engage in outdoor activities.

- Hunters who use historic methods to pursue game will have additional opportunities to do so in 2014. Crossbows and atlatls will be allowed during spring turkey season.
- In the past, turkey hunting was prohibited on public fishing accesses less than 40 acres in size.

Carp, buffalo, suckers, and gar may be harvested using gigs, bows, crossbows, and atlatls at Otter Slough Conservation Area according to area regulations.

Now, Department staff may recommend on a case-by-case basis turkey hunting on small fishing accesses.

• Anglers who use historic methods to harvest fish will have more places to do so at Otter Slough Conservation Area. Carp, buffalo, suckers, and gar may be harvested using gigs, bows, crossbows, and atlatls throughout the area according to area regulations. Previously, only Otter Lake was open to these methods.



To be consistent with other labeling requirements for game species, the date of harvest must now be included on the label for harvested turkeys.

The Conservation Department strives to develop regulations that are precise, concise, and easy to understand. The annual review of the Wildlife Code offers an opportunity to simplify and clarify existing regulations.

- If a person violates the Wildlife Code, the Conservation Commission may suspend, revoke, or deny permits or privileges to him or her. Before this happens, the person has the right to argue his or her case before the Commission. He or she also has the right to judicial review as provided by Missouri statutes. Several rules in the Wildlife Code of Missouri were amended to clarify these facts.
- Hunters should be aware of new labeling requirements for harvested turkeys. Before a turkey can be possessed by anyone other than the taker, the turkey must be labeled with the taker's name, address, Telecheck confirmation number, and, new for 2014, the date of harvest. The addition of the harvest date makes the labeling requirement for turkeys consistent with labeling requirements for other game species.



Many regulations are designed to sustain healthy plant and animal communities. Some rules regulate the harvest of certain species; others curtail the spread of invasive animals and plants.

• Lake of the Ozarks and Truman Lake have a long history of quality catfish angling. But the overabundance of smaller blue catfish and the overharvest of large blue catfish are keeping many blue cats from reaching a large size. To improve blue catfish populations in Lake of



Each year, the Conservation Department's Regulations Committee reviews the Wildlife Code to ensure Missouri's forests, fish, and wildlife are protected. Here's how the process works.

- 1. Changes proposed by the public and Department staff are brought to the Committee to review.
- 2. The Committee researches the effects of the proposed regulation changes. Information reviewed may include costs to taxpayers, effects on wildlife populations, user group surveys, public comments, and feasibility studies.
- 3. When research shows a change would improve a natural resource or provide more opportunities for Missourians to enjoy nature without detrimental effects to natural resources, a proposed regulation change is sent to the Conservation Department's director.
- 4. If the director approves the change, the proposal is submitted to the Conservation Commission, a group of four citizens who are appointed by the governor.
- 5. If passed by the Conservation Commission, the proposed changes are filed with the secretary of state and published in the Missouri Register. A link to the Register can be found at mdc.mo.gov/node/4871.
- 6. Publication of proposed changes in the Missouri Register begins a 30-day public comment period. If no comments are received, the final regulation is filed and becomes effective on the date specified in the proposal or 30 days after publication in the Missouri Code of State Regulations.
- 7. When comments are received, the proposal is reviewed. Based on the public's comments and available research data, the Commission may decide to drop, modify, or implement the regulation.



The virile crayfish, or northern crayfish, will now be allowed to be sold as live bait. This provides a convenient option for anglers who would rather buy live bait than catch crayfish themselves.

the Ozarks, Truman Lake, and their tributaries, blue catfish 26 to 34 inches long must be returned to the water unharmed immediately after being caught, and an angler's daily limit may not contain more than two blue catfish longer than 34 inches. In addition, the daily and possession limit for blue catfish on these waters will be 10. The new regulations will offer an increased daily limit to promote the harvest of smaller blue catfish to help reduce their competition for food and resources with larger blue cats. The new rules will also protect larger blue catfish so they can reach their growth potential and allow a limited harvest of trophy blues longer than 34 inches. Population modeling predicts that, given time, these regulations will help Lake of the Ozarks and Truman Lake support five times more blue catfish 34 inches and larger than they do now.

- To manage deer numbers in areas that have experienced population declines, the number of antlerless permits each hunter can fill has been reduced from unlimited to two in Atchison, Bates, Caldwell, Callaway, Carroll, Dallas, Howard, Laclede, Ray, Vernon, and portions of Boone and Cass counties. This change went into effect during the 2013 firearms deer season.
- In 2012, the Conservation Commission banned the sale of live crayfish for use as bait to protect Missouri's waters from invasive crayfish. This rule has been amended for 2014



Silver carp are an invasive species in Missouri's big rivers. Commercial anglers may now take carp that jump from the water into an angler's boat or onto land.

to allow the sale of the virile crayfish (also known as the northern crayfish). The amendment will help meet the needs of the bait industry and provide a convenient option for anglers who would rather buy live crayfish than catch crayfish themselves. Importation from out-of-state sources of live crayfish for bait sales is still prohibited.

• To align Missouri's regulations with federal rules, shovelnose sturgeon may not be harvested from the Missouri River or on the Mississippi River downstream from Melvin Price Locks and Dam by commercial anglers. These rules went into effect Aug. 30, 2013. Sport anglers are not affected by this rule change.

We Want Your Input

Citizen participation has been the cornerstone of conservation efforts in Missouri since the Department was formed in 1937. To offer input on the *Wildlife Code of Missouri*, visit *mdc.mo.gov/node/24751*. Once there, you can:

- Sign up for email alerts about regulation changes.
- Read the full text of each chapter of the Wildlife Code.
- Offer suggestions on how the Department can improve existing regulations. To see a list of regulations the Department is proposing to amend and offer your comments on the proposed changes, visit *mdc.mo.gov/node/24141*.

• Bighead, silver, common, and grass carp are invasive species that have gained a toehold in Missouri's big rivers. Commercial anglers may now take carp that jump from the water into an angler's boat or onto land. Sport anglers have been able to harvest carp in the same fashion since 2011. This rule became effective Aug. 30, 2013. ▲



Northern Harrier

Visit a Department wetland near you this winter to try to spot this rare winter migrant.

THE SLENDER RAPTOR glided back and forth across the winter prairie, occasionally brushing the tops of bluestem and prairie dock as it methodically scanned the frozen ground for rodents. As I tracked the winged hunter through my longest lens, it began to snow. The white flecks added contrast and texture to the chestnut-colored landscape. Seconds later, the female northern harrier, rim-lit by diffuse sunlight, drifted closer to my hide in a copse of wild plum. I swung the heavy lens, graceful itself on its silky gimbal, and captured the ethereal scene of bird and prairie. Delighted, I had recorded another wonderful memory on the 7,000-acre campus of August A. Busch Memorial Conservation Area in St. Charles County.

The northern harrier (Circus cyaneus), is a lithe hawk with a small head and owl-like face. The female's coloration is typically described as brown with streaked underparts, black bands on the tail, and a white rump patch. One would expect a rather plain-looking hawk, based on this description, but an actual encounter reveals a gorgeous raptor with rich mahogany plumage and ardent eyes. The male is impressive as well with its stark, gray plumage, black wingtips, and the same white rump patch. The male northern harrier is often referred to as the gray ghost.

Northern harriers are listed as an uncommon migrant in Missouri, typically spotted in the early spring and late fall. I've also seen them in the dead of winter, including the individual featured in this story. Harriers cruise close to the ground across fields and marshes in search of rodents, birds, snakes, and other small creatures. Based on my observations, the northern harrier is not a picky eater. One morning after an all-night rain, I watched a female harrier pluck nightcrawlers from the mowed trail behind my house for more than an hour.

If you would like to see a northern harrier for yourself, I suggest a nearby wetland area or other marshy landscape. Sometimes called a marsh hawk, the northern harrier drifts lazily over levees and wetland pools in search of an easy meal such as an unsuspecting shorebird. Its flight behavior is unmistakable as it completes a grid over its hunting ground, often hovering for seconds to pinpoint its prey. Watch for the signature white rump patch of the harrier to solidify your identification.

Although I've photographed northern harriers at Busch Conservation Area where I work, the farm in Franklin County where I live, and several Department wetland areas, I've yet to capture the perfect shot of the elusive male — the gray ghost! Recently, I photographed a male from my deck, which sits high above a descending prairie hillside. Unfortunately, the dreamy gray bird was quartering away from me so I was unable to capture its intense stare. I chalked the experience up to "almost" and took pleasure in knowing that the challenge before me was attainable after all.

> -Story and photo by Danny Brown 500mm lens • f/4.0 • 1/800 sec • ISO 400

We help people discover nature through our online field guide. Visit mdc.mo.gov/node/73 to learn more about Missouri's plants and animals.







Drury-Mincy Conservation Area

This Ozark area is rich in plants and animals you might not find anywhere else.

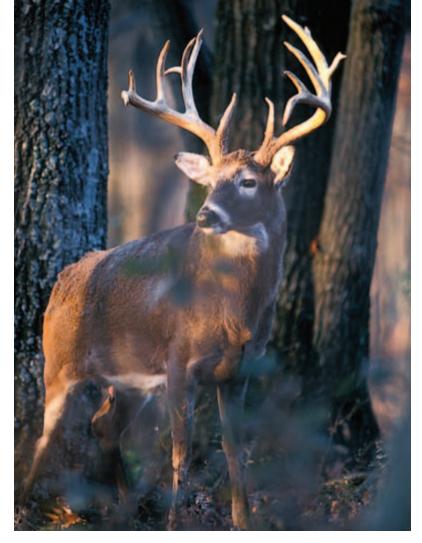
VISIT DRURY-MINCY CONSERVATION Area (CA) in Taney County for a look at the Missouri Ozarks' out-of-the-ordinary outdoors. Located in the heart of the White River Glade region, the area features 3,400 acres of forest alongside rolling hills of bluestem glades and post-oak savannas.

Drury-Mincy CA's diverse landscape makes for a unique mix of wildlife. The area's typical glade species include the eastern collared lizard, tarantula, and pygmy rattlesnake, as well as unusual plants such as purple beardtongue, fringetree, and Ashe juniper.

The area's history is as significant to Missouri conservation as the habitat it provides today. The Department's first white-tailed deer refuge, Drury-Mincy CA harbored one of 14 whitetail herds statewide at the turn of the 20th century. Drury-Mincy deer helped restore whitetail populations across Missouri. Additionally, Drury-Mincy CA was one of three Missouri conservation areas that supported flocks of native wild turkeys. The area provided 300 turkeys for statewide restoration projects during the 1960s.

Today, Drury-Mincy CA offers great wildlife viewing, hunting, and fishing. It is a popular destination for bass, catfish, crappie, sunfish, and sucker fishing, as well as squirrel, turkey, and archery deer hunting. A muzzleloader only, Departmentmanaged deer hunt occurs on the area in October for hunters with approved applications. Hunters can hone their skills at the area's unmanned shooting range.

Wildlife viewers are welcome to explore the area year-round via two hiking trails, the 1.5-mile Bear Cave Trail and shorter Thurman's Sink



Trail. You might also gear up to enjoy nighttime nature viewing and camping at Mincy Camping Area, which provides eight fire rings and eight picnic tables, as well as privies.

Because the area contains mostly glade and woodland habitat, managers use prescribed fire to maintain Drury-Mincy CA's natural diversity. A prescribed-fire rotation puts fire on roughly 80 percent of the area's 5,699 acres every three to five years. Managers plant 50 to 75 acres of high-quality green browse and small-grain food plots annually as supplemental food sources for deer, turkey, and small-game populations. Additionally, the Department manages the corridor along Bee Creek to prevent streambank erosion and provide critical habitat for the endangered Swainson's warbler and other Neotropical migrant songbirds.

Drury-Mincy CA is located just southeast of Branson off Route J. For more information, visit the website listed below.

—Rebecca Martin, photo by Jim Rathert



Recreation opportunities: bird watching, camping, fishing, hiking, hunting, shooting range **Unique features:** This area features unusual species of glade plants and animals and was Missouri's first white-tailed deer refuge.

For More Information Call 417-256-7161 or visit mdc.mo.gov/a5401.

DISCOVER DIDEAS FOR FAMILY FUN

To find more events near you, call your regional office (see Page 3), or visit *mdc.mo.gov* and choose your region.

MAPLE SUGAR FESTIVAL

FEB. 1 • SATURDAY • 10 A.M.-3 P.M.

St. Louis Region, Rockwoods Reservation,
2751 Glencoe Rd., Wildwood, MO 63038
No registration • All ages
It's maple sugar time! Experience conservation success and forest resources at their finest — and sweetest. Taste delicious syrup, sugar on snow taffy, and pure maple sugar.

ADVENTURE BIRDING — WINTER BIRDS

FEB. 8 • SATURDAY • 10-11 A.M.

Central Region, Runge Conservation Nature
Center, MO Hwy 179, Jefferson City, MO 65102
No registration • All ages
Join this new monthly activity for people
who share a passion for birds. We will

Tufted titmouse

begin with winter bird identification on the trails at Runge Conservation Nature Center. No previous experience is necessary. Please dress for the weather. Binoculars and field guides will be available.

BRINGING MARTINS HOME

FEB. 11 • TUESDAY • 6:30-7:30 P.M.

Southeast Region, Cape Girardeau
Conservation Nature Center, 2289 County
Park Dr., Cape Girardeau, MO 63701
No registration • Ages 8 and older
Purple martins rely on man-made nesting structures for survival. Whether you're trying to attract martins, have an existing colony, or are just interested in learning more, you'll enjoy this program.

HALF-DAY DISCOVERY HIKE: THREE CREEKS CONSERVATION AREA

FEB. 15 • SATURDAY • 8 A.M.-12 P.M.

Central Region, Runge Conservation Nature Center, MO Hwy 179, Jefferson City, MO 65102 Registration required, call 573-526-5544 beginning Feb. 1 • Ages 8 and older Come discover Three Creeks Conservation Area (CA) with us on this volunteer-led hike to learn basic map reading and compass skills, as well as information about plants, animals, and natural communities. We'll meet at the nature center and carpool to Three Creeks CA. Bring water, wear comfortable hiking shoes, and dress for the weather.

MUSICAL MAPLES

FEB. 15 • SATURDAY • 1:30-2:30 P.M.

Kansas City Region, Anita B. Gorman
Conservation Discovery Center, 4750 Troost
Ave., Kansas City, MO 64110
No registration • Ages 6 and older
We will take you on a musical journey
that will leave a lasting impression
about the value of maple trees.

VULTURE VENTURE

FEB. 22 • SATURDAY • NOON-5 P.M.

Southwest Region, Shepherd of the Hills Fish Hatchery and Conservation Center, 483 Hatchery Rd., Branson, MO 65616

No registration
All ages
This 18th annual
event includes hourly
presentations featuring a live turkey vulture (last one starts
at 4 p.m.). Indoors,
enjoy games, trivia,
and activities.
Outdoors, view one
of the largest winter
roosts of vultures in the
state near the hatchery.

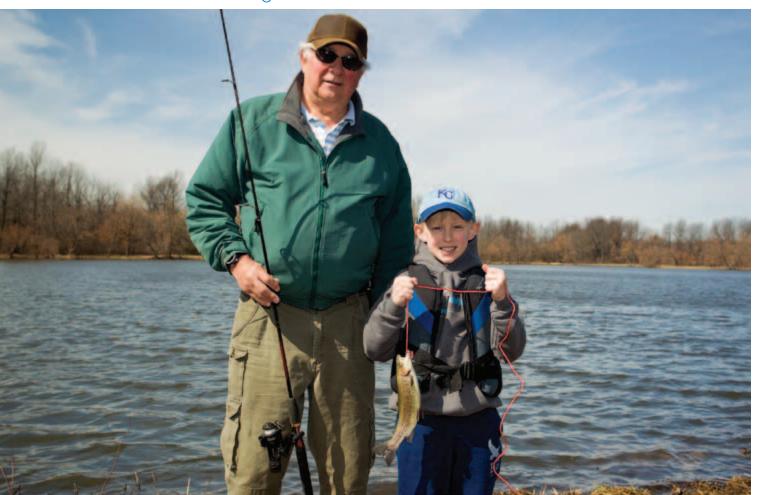
Turkey vulture

DISCOVER NATURE PHOTO CONTEST

Send us your best images of what discovering nature means to you for our new photo contest. New for this year, people can submit entries through the social network of their choice (Instagram, Facebook, Twitter, Google+, etc.). When you want to submit a photo through a social network, use the hashtag "#MDCdiscovernature." For a full list of rules, and to see all submissions gathered together on a tagboard, just navigate to our discover nature contest website: <code>mdc.mo.gov/node/26255</code>. Department staff will select a winner every month and display it on our website. All of the monthly winners will appear in the January 2015 issue of the magazine.



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I Am Conservation

Tony Rodak, of Independence, pauses from fishing with his 9-year-old grandson, Cameron Rieder, to pose for a picture with the rainbow trout that Rieder had just caught. The pair were fishing at James A. Reed Memorial Wildlife Area near Lee's Summit. Certain lakes at the Reed area are part of the Missouri Department of Conservation's urban winter trout stocking program. This program stocks trout throughout the state during the winter months, when warm water species are less active and harder to catch but cold-water species, such as trout, do very well. Rodak said he grew up fishing in Missouri. "I love the sport and hope it will always be available for my grandson and future generations," He says he enjoys winter trout fishing because it allows him to get outdoors and see the changes in nature during the winter months. His grandson likes the excitement of fighting a fish on his line the best. He also likes spending time with his grandpa. Rodak said Rieder's favorite fishing is for catfish. Rodak spends a lot of time fishing at the Reed area because it is near his house, but he also enjoys hunting for deer and waterfowl at Fountain Grove Conservation Area and Swan Lake National Wildlife Refuge. "I've been in the woods and near the water since I was a kid," said Rodak. "That's where I feel most relaxed and at home." —photo by Noppadol Paothong